# MEASLES

***Preventing Spread in School and Child Care Settings***

## What is measles?

Measles is a very contagious respiratory disease caused by a virus. Some people get very sick from measles. It can cause an infection in the lungs or swelling in the brain and can be fatal. Without immune protection, 9 out of 10 people exposed will become infected. Before the measles vaccine became available in the 1960s, the virus used to kill about 500 and disable about 1,000 more people every year in the United States.

## How do people get measles?

Measles is easily spread from person to person. When an infected person talks, coughs or sneezes, the virus is released into the air and enters another person's body through the nose, mouth or throat. People can also become sick if they come in contact with the mucus or saliva (spit) from an infected person. The measles virus can live on contaminated surfaces and in the air for up to two hours after an infected person was present. A person infected with measles can pass the virus to others from 4 days before through 4 days after a rash develops.

## What can happen if someone gets measles?

Initial symptoms include high fever, cough, runny nose, red, watery eyes, followed with rash in 3-4 days. Common complications include ear infections and diarrhea. There are several possible severe measles complications, including pneumonia (infection of the lungs) and encephalitis (infection and swelling of the brain). Therefore, hospitalizations with measles are common and the disease can be fatal. Measles infection is devastating for those with weak immune system, such as those with cancer or other chronic conditions. Measles may cause mothers to give birth prematurely or have low-birth-weight babies. Rare but fatal brain complication can also develop years after infection.

## If a person is exposed, does that mean they will get sick or infected? And what will they need to do?

An exposure occurs when a person is in the same enclosed space (e.g., room, office, waiting room, building) with someone who has measles, or occupies this space within 2 hours after the infected person has left. People rarely get sick with measles if they have been appropriately vaccinated. About 9 out of 10 people without immunity to measles will get measles when they are nearby someone with the disease. Depending upon the situation, people without proof of immunity that have been near someone with measles will need to remain home for 21 days after their last exposure.

## Should schools or childcare facilities be closed during a measles outbreak?

The decision to close a school is an administrative decision that should be made only after consultation with public health officials and the district medical personnel. Licensed childcare facilities will need to work with their local public health agency and follow their guidance and direction.

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## Missouri Statutes & Regulations

- Missouri school immunization requirements, reporting information and other tools are located at: School Immunization Information
- Case reporting requirements, investigation guidance and control measures can be found in the measles section of the communicable disease manual.

## What can schools do now to prepare for a case of measles?

- **Encourage students and staff to stay home when sick.**
- **Promote respiratory hygiene and cough etiquette.**
- **Encourage frequent handwashing. If soap and water are not available, use hand sanitizer.**
- **Disinfect frequently touched surfaces such as doorknobs, tables, and counters.**

- **Check immunization records.** Review the immunization status for all children **AND** staff members/volunteers. Proof of immunity includes:
  - Written documentation of age-appropriate measles vaccination (one or two doses)
    - Receipt of 1+ doses of a measles-containing vaccine administered on or after the first birthday for preschool-age children and adults not at high risk, and two doses of measles-containing vaccine for school-age children and adults at high risk for exposure transmission (i.e., health care personnel, international travelers, and students at post-high school educational institutions)
  - Laboratory evidence of immunity (blood test) or laboratory confirmation of measles disease
  - Birth before 1957 (adults born before 1957 are more likely to have had measles as a child and are generally, but not always, considered immune)

- **Develop a plan and implement strategies to rapidly identify staff and students susceptible to measles.**
  During measles exposures events, the ability to rapidly identify susceptible individuals is essential for appropriate public health interventions such as postexposure prophylaxis (medication taken after a possible exposure to a virus) or exclusion/quarantine.

- **Communicate broadly with all parents and staff reminding them of immunization recommendations.**
  Share the CDC recommendations for measles vaccination. Two doses of the measles, mumps, rubella (MMR) vaccine are 97% effective for preventing measles, and one dose is 93% effective for preventing measles. Call to confirm measles vaccines are available prior to arriving.
  Measles vaccines are typically available from:
  - Many doctors' offices
  - Local health departments
  - Federally qualified health centers (for under or uninsured individuals)
  - Urgent care centers
  - Local pharmacies

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- **Inform families of unvaccinated children and unvaccinated staff that they may need to stay home for up to 21 days each time they are near someone who has measles.**
  The following are general guidelines for exclusion. Please note that schools should make decisions to exclude children and staff in consultation with their local health department or DHSS.
  - Exclude children and staff who have measles until they are no longer contagious (through 4 days after rash onset).
  - Exclude exposed children and staff members who do not have proof of immunity from day 5 after the first exposure through day 21 following the last exposure.

- **Review the signs and symptoms of measles with staff.**
  Be watchful for students who may come to school with fever and other signs and symptoms of measles.
  - Identify a private room for students suspected of having measles to wait, while their parents are coming to pick them up from school.
  - If measles is suspected, advise the family to seek care at the office of their healthcare provider, at an urgent care, or an emergency room.
    - They should notify the health care facility before they arrive that measles is suspected so that care can be taken to limit further spread.

- **Report suspected measles cases to your local health department.**

## Steps to Take if There has Been a Person with Measles at Your School

1. **Contact your local health department** if someone with measles may have been at your school.

2. **Follow all instructions** given to you by DHSS or your local health department staff.

3. **Review the attendance records for all students and staff** that attended your school during the time the person with measles may have been at your school and track the following information:
   - Student/staff first and last name
   - Parent/guardian first and last name (for students)
   - Address
   - Phone number
   - Date of birth
   - Classroom(s) of student/staff
   - Bus information for student
   - MMR vaccination status and dates

4. If DHSS or your local health department has confirmed the person did have measles and they were sick while at your school, **you may need to share the information gathered during step 3 with DHSS or your local health department** to help prevent spread of measles to others**.**

- It is important that public health gets information as soon as possible so that it can notify families of the exposure, let families know what they should do if they were not vaccinated at the time of exposure, and let families know how they can contact the investigating entity and seek care if they develop symptoms.

5. **Implement the public health recommendations** for people that DHSS or your local health department has determined may have been exposed to measles and could potentially spread measles to other people
    - Depending upon the situation, people without proof of immunity that have been near someone with measles will need to remain home for 21 days after their last exposure.

## ADDITIONAL RESOURCES

Measles County-Level Fact Sheets | Missouri Department of Health and Senior Services
Make the Grade A+ (media campaign) | Missouri Department of Health and Senior Services
Measles (Rubeola) | CDC